

**What is claimed is:**

1. A multi-functioned wafer aligner comprising:

a multi-functioned unit performing a wafer centering operation, a wafer flat zone alignment, and a wafer damage detection; and

5 a main processor deciding positions of the wafer centering operation and the wafer flat zone alignment, and discriminating wafer damage, such as wafer breakage and wafer crack, by calculating an accumulated digital signal inputted from the multi-functioned unit.

2. The multi-functioned wafer aligner of claim 1, wherein the multi-functioned unit comprises:

a wafer rotator;

an array of multiple luminous emitters for emitting incident rays;

an array of multiple photo detecting sensors for receiving reflected rays from the wafer to detect a wafer position and a wafer flat zone, wherein each photo detecting sensor faces to each luminous emitter; and

an array of multiple damage-detecting sensors for receiving reflected rays from edge of the wafer to detect wafer damage.

3. The multi-functioned wafer aligner of claim 2, wherein a first area in the array of multiple damage-detecting sensors receives reflected rays when the wafer is not damaged, and a second area in the array of multiple damage-detecting sensors receives reflected rays when the wafer is damaged.

4. The multi-functioned wafer aligner of claim 3, wherein the main processor further comprises

an alarm unit when the second area receives reflected rays.

5. The multi-functioned wafer aligner of claim 2, wherein the multi-functioned unit comprises an array of multiple luminous emitters for emitting incident rays to the edge of the front side of the wafer and an array of multiple luminous emitters for emitting incident rays to the edge of the back side of the wafer.

6. The multi-functioned wafer aligner of claim 5, wherein a first area in the array of multiple damage-detecting sensors receives reflected rays when the wafer is not damaged, and a second area in the array of multiple damage-detecting sensors receives reflected rays when the wafer is damaged.

7. A multi-functioned wafer aligner comprising:

a rotatable rotation chuck, adapted to receive a semiconductor wafer;

a wafer transfer unit, adapted to position said wafer upon said rotation chuck;

a sensor body, said sensor body comprising:

a position compensator; and

a wafer damage detector;

wherein said sensor body is disposed in relation to said rotation chuck so as to receive

an edge of said wafer within said position compensator.

8. The apparatus of claim 7 wherein said position compensator further comprises:

a luminous source disposed on a first side of said edge of said wafer; and

a photodetector disposed upon an opposing side of said edge of said wafer, said photodetector adapted to receive light emitted by said luminous source.

9. The apparatus of claim 7 wherein said wafer damage detector further comprises:

- 5           a luminous source disposed on a first side of said wafer edge; and
- a damage-detecting array of sensors adapted to receive light emitted from said luminous source that is reflected off of said wafer edge.

10. A method multifunctionally positioning a wafer and detecting wafer damage, said method comprising:

- providing a luminous source on a first side of an edge of said wafer;
- providing a photodetector on an opposing side of said wafer, said photodetector adapted to receive light emitted by said luminous source;
- providing a damage-detecting array of sensors adapted to receive light emitted from said luminous source that is reflected off of said wafer edge;
- rotating said wafer;
- determining the position of said wafer by examination of light received by said photodetector; and
- inspecting for damage to said wafer by examining the light received by said damage-
- 20   detecting array of sensors.